## ABSTRACT

The invention provides an incubator 1 wherein a microplate transport device 5 is disposed inside a chamber 11 centrally thereof. The transport device 5 comprises a transport table 50 for placing a microplate thereon and is capable of driving the table 50 along the directions of three axes, i.e., X-axis, Y-axis and Z-axis. A plurality of stackers 3 are arranged in the direction of Y-axis at each of opposite sides of the transport device 5 along the direction of X-axis. Each of the stackers 3 has a plurality of microplate accommodating portions arranged in the direction of Z-axis. The microplate is movable into or out of the desired accommodating portion by the transport device 5.